

**SYSTEM AND METHOD TO AVOID VOLTAGE READ ERRORS IN OPEN DIGIT
LINE ARRAY DYNAMIC RANDOM ACCESS MEMORIES**

ABSTRACT OF THE DISCLOSURE

Selective coupling devices directed by coupling controllers prevent cell plate and/or substrate disturbances from causing memory cell read and refresh errors in open digit line array memory devices. Using selective decoupling devices, when memory cells in an active row store an appreciably unbalanced number of either zeroes or ones, reading the cells generates a voltage transient in the cell plate and/or substrate that can be coupled to a reference digit line because the cell plates and/or substrates of the active sub-array are normally coupled to the cell plates and/or substrates of the reference arrays. By decoupling the cell plate and/or substrate of the active sub-array from the cell plates and/or substrates of the reference arrays, any coupling of the voltage transients to reference digit lines is reduced.